WHAT IS CLAIMED IS:

1. A catheter unit which guides a tube, which leads a radiation source used in intraluminal radiation therapy into a body cavity, into the body cavity, comprising:

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a first catheter which has an insert section capable of being inserted into the body cavity, an elbow section attached to the distal end portion of the insert section and bendable, and a bending control section which bends the elbow section, and guides the tube; and

a second catheter attached to the first catheter, holding the insert section, said second catheter comprising at least one retaining portion which is to be opened and closed, and a control section which is configured to open and close the retaining portion to be anchored in the body cavity when opened by the control section.

- 2. A catheter unit according to claim 1, which further comprises an anchor section which removably anchors the first and second catheters to each other, with the second catheter fitted on the first catheter and the two catheters assembled in a predetermined position.
- 3. A catheter unit according to claim 1, which further comprises a hold section attached to the first catheter and designed to be held to support the

catheter unit.

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- 4. A catheter unit according to claim 1, wherein the second catheter has an outer sheath and an inner sheath coupled to each other on the distal end side with respect to the retaining portion, and the retaining portion opens and closes as the outer sheath is slid relative to the inner sheath in the axial direction of the catheter.
- 5. A catheter unit according to claim 4, wherein the outer sheath has a plurality of slits cut in the axial direction of the first catheter so that regions between the slits define the retaining portion.
 - 6. A catheter unit which guides a tube, which leads a radiation source used in intraluminal radiation therapy into a body cavity, comprising:
- a first catheter which has an insert section capable of being inserted into the body cavity, an elbow section attached to the distal end portion of the insert section and bendable, and a bending control section which bends the elbow section, and guides the tube; and
- a second catheter attached to the first catheter, holding the insert section and maintaining the elbow section in extending state, said second catheter comprising at least one retaining portion which is to be opened and closed, and operation means for opening and closing the retaining portion, said retaining

portion being anchored in the body cavity when opened by the operation means.

7. A catheter unit according to claim 6, which further comprises anchor means for removably anchoring the first and second catheters to each other, with the second catheter fitted on the first catheter and the two catheters assembled in a predetermined position.

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- 8. A catheter unit according to claim 6, which further comprises holding means attached to the first catheter and designed to be held to support the catheter unit.
- 9. A catheter unit according to claim 6, wherein the second catheter has an outer sheath and an inner sheath coupled to each other on the distal end side with respect to the retaining portion, and has opening/closing means for opening and closing the retaining portion as the outer sheath is slid relative to the inner sheath in the axial direction of the catheter.
- 10. A catheter unit according to claim 9, wherein the outer sheath has a plurality of slits cut in the axial direction of the first catheter so that regions between the slits define the retaining portion.
- 11. A method of guiding a tube, which leads a radiation source into a living body cavity, into the body cavity through a conduit of a catheter so that the radiation source administers radiation therapy to the

interior of the body cavity, comprising:

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a step of setting a tube in the conduit of the catheter;

a step of inserting the catheter, having the tube set in the conduit thereof, into the living body cavity;

a step of inserting an endoscope into the body cavity and observing the position of the catheter and the state of insertion as the catheter is inserted into the body cavity; and

a step of opening a retaining portion of the catheter to reduce the eccentricity of the tube in the cavity and settle the position of detention of the catheter in the cavity.